



**TO: Chairman Pringle and Authority Board Members**

**FROM: Dan Leavitt, Deputy Director**

**DATE: April 27, 2011**

**RE: Update to the San Francisco-San Jose Section Alternatives Analysis**

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#### **Background**

In 2009, the Authority completed the scoping process for the proposed HST Project for the San Francisco-San Jose Section. This was followed with completion of Preliminary Alternatives Analysis in April 2010 and a subsequent Supplemental Alternatives Analysis in August 2010. In 2010 the Federal Railroad Administration determined the San Francisco-San Jose Section was eligible to receive ARRA funds and potentially one of the first sections to be constructed as part of the statewide system. In December 2010, the Central Valley was designated to receive the federal funds for construction as the backbone for the system.

This designation allows the San Francisco-San Jose section additional time to study many of the complex issues related to developing high speed train service along a shared corridor.

#### **Discussion**

The Authority, in partnership with Caltrain and the Federal Railroad Administration (FRA), will develop a phased implementation approach for High Speed Train (HST) service between San Francisco and San Jose. This is a positive opportunity to collaborate with local and regional agencies, and the communities to incorporate a phased implementation approach into the project environmental documentation.

The phased implementation approach will enable the Authority and its partners, including Caltrain and community stakeholders, to study how to provide initial HST service between San Francisco and San Jose in the most cost effective manner and as soon as possible to coincide with the initiation of HST service to San Jose via the Central Valley. The phase implementation approach would include an Initial Operating Phase (IOP), which would be the first phase in development of the fully built system.

The IOP is defined as the minimum infrastructure required to support an initial level of HST service. The Draft Environmental Impact Report/Study will evaluate both the IOP and full project as envisioned in Prop. 1A.

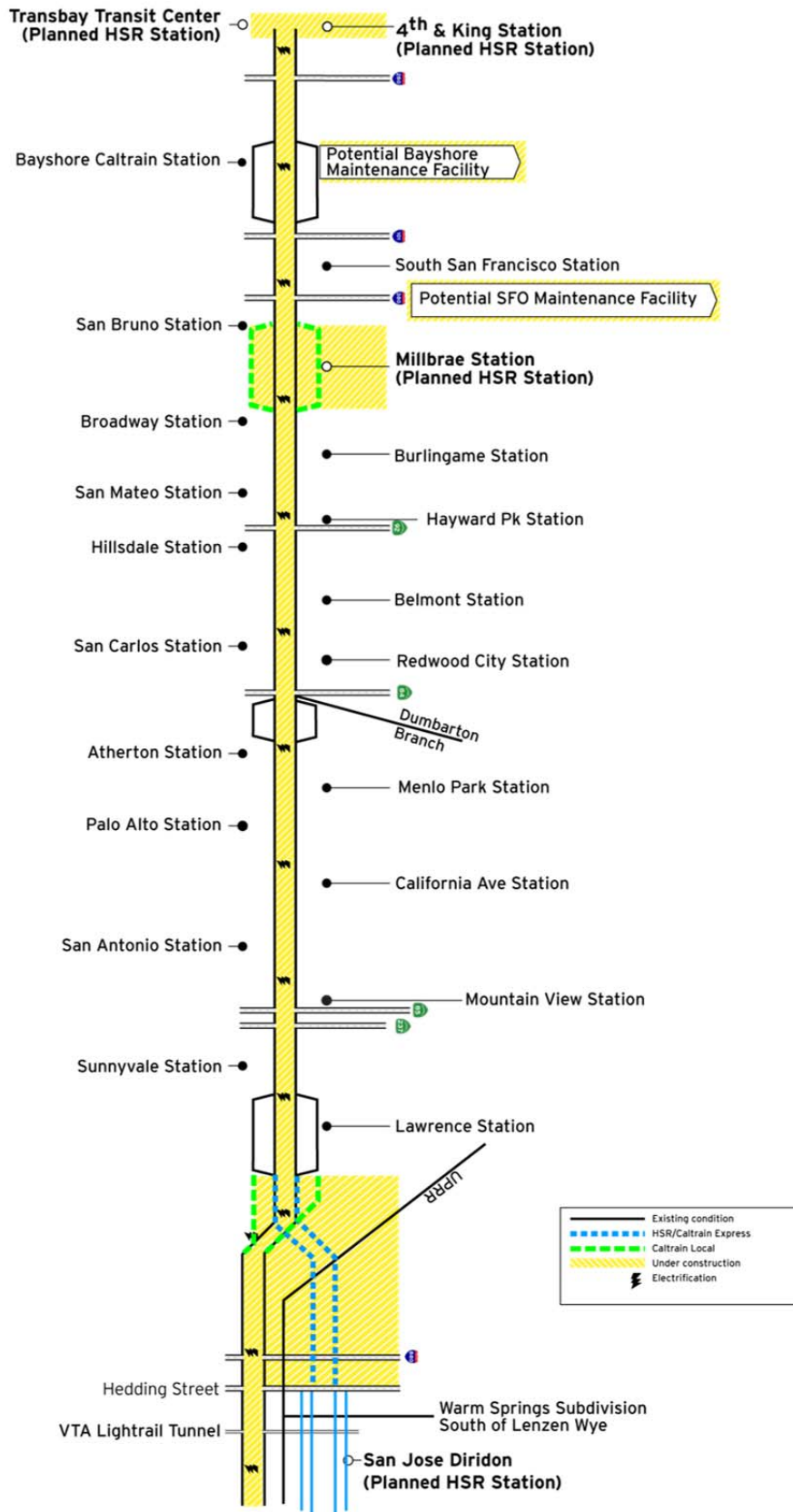
In April, the Authority met with staff and elected officials of many of the cities on the San Francisco-San Jose corridor, either individually or as part of group meetings. In general, stakeholders have supported the concept of incremental development driven by the need for additional capacity and availability of funding.

However, there is also concern that a phased implementation on the San Francisco-San Jose corridor will stop with the IOP and the commitment to grade-separating the line or extending to Transbay Transit Center in San Francisco will not be realized for many years.

The Authority has begun discussions with Caltrain over defining an IOP (see figure 1), which assumes the following project attributes:

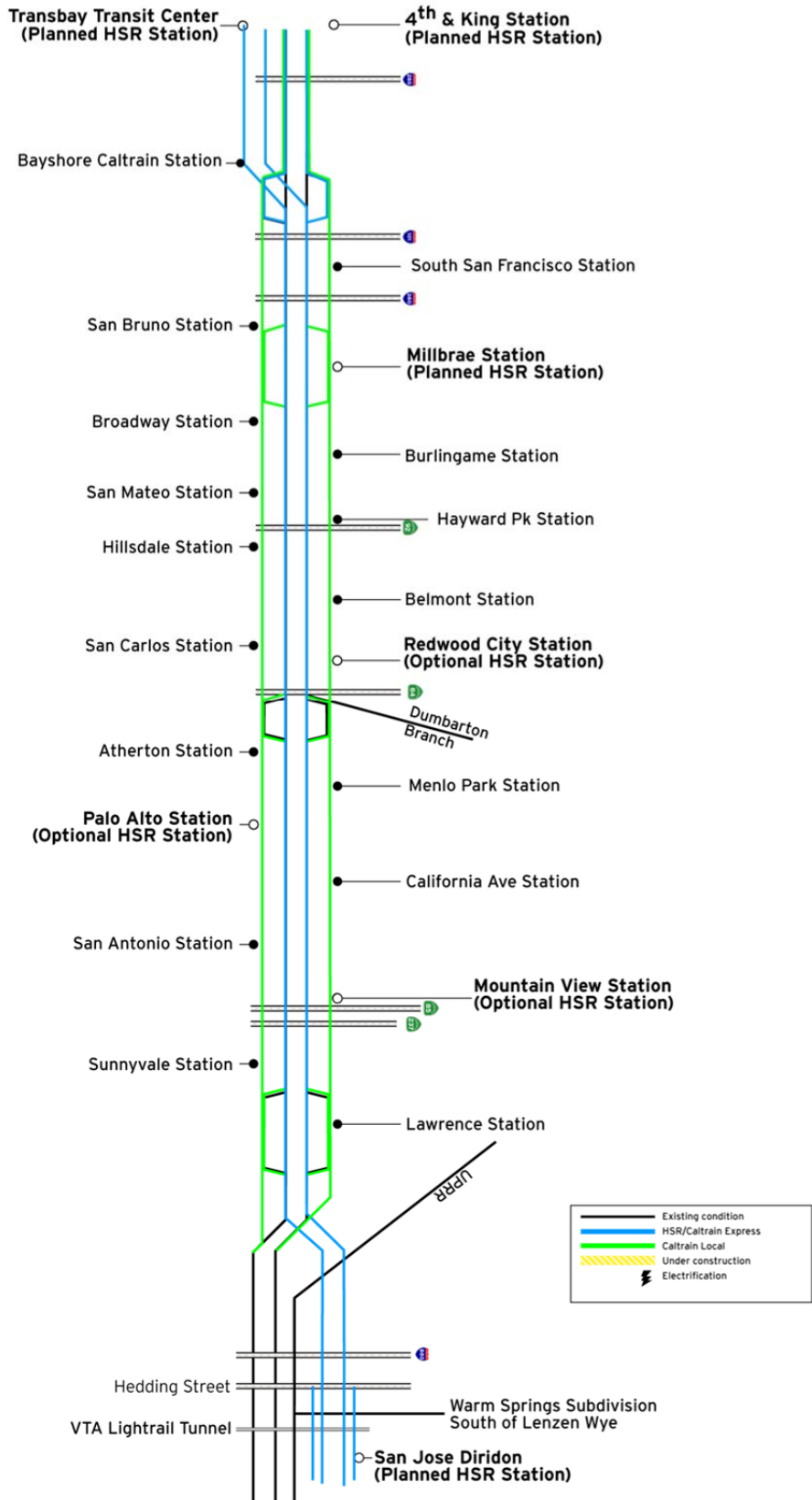
1. Electrification of the Caltrain line from San Francisco (4<sup>th</sup> and King Station) to Tamien Caltrain station (inclusive of Caltrain's CEMOF facility and Diridon station) and a new HST elevated line into Diridon HST station.
2. The construction of a track tie-in from Diridon Station (HST upper level) into Caltrain at Santa Clara.
3. Positive Train Control: interoperable for both Caltrain and HST operations.
4. Possible grade crossing safety improvements at existing at-grade crossings.
5. Millbrae HST Station: either a temporary station (one high-level HST platform serving one or two of three tracks at-grade) or a full build-out with three tracks at-grade and one underground platform for Caltrain.
6. 4<sup>th</sup> & King HST Station: reconfiguration of one or more platforms for HST service and other station facility improvements.
7. Analysis of existing structures and tunnels to determine upgrades needed to accommodate HST service.
8. A maintenance and storage facility for high speed trains: SFO and Brisbane are currently being studied as possible sites.

**Figure 1: Initial Operating Phase**



Because Prop 1A mandates development of a high speed train system capable of five-minute operating headways and connecting Los Angeles and San Francisco within two hours and forty minutes and between San Francisco and San Jose in thirty minutes. The Authority is required to study and environmentally clear that project. Additionally, the California Environmental Quality Act requires that the Authority study the likely system that would be in operation in 2035. However, the Authority is able to study the potential environmental impacts of an initial operating phase (IOP) and explain how the system will be developed over time from the initial system shown in Figure 1 to the full system shown in Figure 2.

Figure 2: High Speed Rail "Full Build-Out"



### **Next Steps**

Caltrain and the Authority have identified preliminary issues and questions that they need to work through as part of defining the IOP and future operating plan:

- **Coordination of Service Planning:** The determination of how many Caltrain and HST can operate on the Caltrain corridor per hour and what is the most appropriate mix of services. Will also need to determine what level of service is required when service starts and what is required in 2035.
- **Operations and Maintenance:** Determine which agency will be responsible for operating, maintaining and dispatching the railroad on a day to day basis.
- **Systems:** Need to develop the systems (traction power, overhead catenary, signal, PTC, communications etc.) that work for both railroads, both in the immediate future and long term.
- **Grade Crossings:** Determine if any additional improvements are needed to Caltrain's existing grade protection program for the IOP.
- **Infrastructure:** Work with Caltrain and the cities on developing a phased implementation plan that meets both the operating railroad's interests, but also the long term plans and visions for the cities that the corridor serves.

To complete this effort, the timeline for completion of the DEIR/EIS, has been extended to 2012 (see figure 3). The document will evaluate the environmental impacts of an IOP and complete build out of the system in 2035. There will also be a chapter on phasing that will outline the steps between the IOP and the “full build” project. The phased implementation approach will allow for more time to consider design refinements of later phases of the ultimate build alternative as they are implemented.

**Figure 3: San Francisco-San Jose Section Updated Schedule**

**CALIFORNIA HIGH-SPEED TRAIN PROJECT SCHEDULE, SAN FRANCISCO - SAN JOSE SECTION**

